

Application S/N 10/678,489
Amendment Dated: December 22, 2005
Response to Office Action dated: August 23, 2005

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-6 (cancelled)

7. (currently amended) A module, comprising:
- a first substrate comprised of a first material;
 - at least a second substrate comprised of at least a second material;
 - ~~selectively applied solder of a first composition residing between the first~~
- substrate and at least the second substrate on at least a first area; and
- ~~selectively applied solder of at least a second composition residing between the~~
- first substrate and at least the second substrate on at least a separate area from the first area such that the solder of the first composition and the solder of the second composition are vertically separated;
- wherein both the solder of the first composition and the solder of the second composition are in a collapsed state.
8. (currently amended) The module of claim 7, wherein the first substrate has a first coefficient of thermal expansion and the second composition has a second coefficient of thermal expansion ~~no cracks exist in the module as a result of a reflow process such that the module compensates for the different coefficients of thermal expansion between the first substrate and at least the second substrate during cooling of the reflow~~

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~~process by using the selectively applied solder of the first composition and of the second composition.~~

9. (previously presented) The module of claim 7, wherein the first substrate is comprised of a printed circuit board material having a coefficient of thermal expansion and the second substrate is a ceramic material having a different coefficient of thermal expansion.

10. (currently amended) The module of claim 7, wherein the ~~selectively applied~~ solder of the first composition has a higher melting point solder than the ~~selectively applied~~ solder of the second composition.

11. (original) The module of claim 10, wherein the higher melting point solder is comprised of approximately 95.5%Sn, 3.8%Ag and 0.7%Cu.

12. (currently amended) The module of claim 10, wherein the ~~selectively applied~~ solder of the first composition is ~~placed~~ on input/output solder pads.

13. (original) The module of claim 10, wherein the solder of the second composition is comprised of approximately 57%Bi, 42%Sn, and 1%Ag.

14. (currently amended) The module of claim 10, wherein the ~~selectively applied~~ solder of at least the second composition is ~~placed~~ on ground pads.

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15. (original) The module of claim 7 wherein the module is a ball grid array package.

16. (currently amended) The module of claim 7, wherein the ~~selectively applied~~ solder of the first composition and the ~~selectively applied~~ solder of at least the second composition are comprised of solder balls.

17. (currently amended) The module of claim 7, wherein the ~~selectively applied~~ solder of the first composition and the ~~selectively applied~~ solder of at least the second composition are comprised of solder paste.

18. (currently amended) The module of claim 16, wherein the ~~selectively applied~~ solder of the first composition is ~~applied to~~ in a substantially centrally located area on at least one among the first substrate and the second substrate and the ~~selectively applied~~ solder of at least the second composition is ~~applied to~~ in a substantially peripherally located area about the centrally located area, wherein the solder of the first composition has a higher melting point than the solder of the second composition.

19. (currently amended) The module of claim ~~47~~ 7, wherein the ~~selectively applied~~ solder of the first composition is ~~applied to~~ in a substantially centrally located area on at least one among the first substrate and the second substrate and the ~~selectively applied~~ solder of at least the second composition is ~~applied to~~ in a substantially peripherally located area about the centrally located area, wherein the solder of the first composition has a higher melting point than the solder of the second composition.

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20. (currently amended) The module of claim 7, wherein at least one among the first substrate and the second substrate further comprises a plurality of solder pads and the ~~selectively applied~~ solder of the first composition is ~~selectively applied to~~ on a different set of solder pads among the plurality of solder pads than the ~~selectively applied~~ solder of the second composition.